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Access to Agricultural Information by Fish Farmers in Niger Delta Region of Nigeria

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Introduction

Among the varieties of agricultural practices is fish farming which is predominant in the coastal states of Nigeria. Currently, there is observed increase in the population of fish farms and farmers. Fishing is no longer restricted to the wild alone; fish farms can be found around towns and villages even behind peoples homes. To sustain this development, it becomes imperative that information on and for them be provided. This is because information is the driving and sustaining force behind any development strategy.

In agriculture, the role of information in enhancing agricultural development cannot be over emphasized. Information is vital for increasing production and improving marketing and distribution strategies (Oladele, 2006). Information also opens windows of sharing experiences, best practices, sources of financial aids and new markets. As posited by Aina et al (1995) information has a vital role to play in improving and sustaining agricultural production of any nation.

For fish farmers, they would need information on fish farming technologies, construction and management, breeds and spawning, processing, storage and marketing (Ofuoku, et al, 2008) and financing. Access to information is very essential for increased productivity by fish farmers. In Nigeria agricultural information is available through NAERLS and its information services, (Ekoja, 2003). They are available in the many agricultural research institutes and school of agriculture in the universities (Adomi, et al 2003) as well as the federal and state ministries of agriculture. Many previous studies agree that the problem of farmers is access to agricultural information; and that even with the advent of information technologies which has succeeded in eliminating bottlenecks in information dissemination; constraints to access to information is still a real experience, (Oladele, 2006).

The focus of this survey is to ascertain the challenges of access to information that fish farmers are facing, particularly the new crop of fish farmers who are not illiterates, in two selected states of Niger Delta Region of Nigeria. Specifically, this study is aimed at:

To ascertain the demographic characteristics of fish farmers.

- To determine the level of access of agricultural information by fish farmers.
- To determine the source(s) of agricultural information by fish farmer.
- Identify constraints to access of agricultural information by fish farmers.

Background Information

The Niger Delta Region is one of the largest wetlands in the world (NNPC, 2008). This geo-political zone is occupied mainly by the minorities of Southern Nigeria which currently comprises the six states of Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers. With time, the region has been redefined to encompass the contiguous three other oil-producing states; Abia, Imo and Ondo, in addition

to the original six. The region covers an area of 70,000 square kilometers, with sandy coastal ridge barriers, brackish or saline mangroves, permanent and seasonal swamp forests as well as low land rain forest with the entire area criss-crossed by a large number of rivers rivulets, streams, canals and creeks (NNPC, 2005). Bayelsa and Delta States are at the centre of the Niger Delta Region. Bayelsa is the central home of the Ijaws who are predominantly fishermen. Bayelsa comprises 8 local government areas. Delta State houses various ethnic nationalities, but with identical customs, beliefs and culture, with 25 local government areas. Agriculture is the most dominant economic activity in both states with crop framing and fishing activities accounting for about 80% of all forms of agricultural activity (MEP, 2008).

Both states are rich in petroleum and gas resources, and at present produce the biggest proportion of crude petroleum and gas in Nigeria. These states are endowed with many rivers and waterways.

Methodology

The survey research method was adopted. The population of fish farmers was drawn form Bayelsa and Delta States of the Niger Delta Region of Nigeria. The sampled size was taken form Ogbia/Otuekpeti axis; Yenogoa/Amassoma axis in Bayelsa State, Oleh/Ozoro axis, and Warri/Ughelli axis in Delta State. These above mentioned axes comprise of several urban and rural communities spread across various local government areas, which include Ogbia, Warri North, Warri South, Warri South West, Ughelli North, Ughelli South, Isoko South, Isoko North, Southern Ijaw and Yenogoa local government areas. In these areas, fish farmers are predominant. The instruments used for data collection were questionnaire, oral interview and observation method. A total of 300 questionnaires were administered, representing 100 in each of the designated axis. These instruments were personally administered by the researcher. Data were analyzed using descriptive statistics.

Findings and Discussion

TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF FISH FARMERS

	VARIABLE	FREQUENCY	PERCENTAGE
SEX	Male	252	84%
	Female	48	16%
AGE	16-20yrs	-	-
	21-25 yrs	-	-
	26-30 yrs	13	4.3%
	31-35 yrs	42	14%
	36-40 yrs	62	20.6%
	41-45 yrs	79	26.3%
	46-50yrs	55	18.3%
	51 and above	49	16.3%
QUALIFICATION	B.A/B.Sc and above	142	47.3%
	HNS/OND	58	19.3%
	N.C.E./T.C2	22	7.3%
	WAEC	30	10%
	PSLC	48	16%

Data from table 1 above indicates that majority of the fish farmers are male 252 (84%). This could be as a result of the nature of fish farming which involves close supervision and monitoring. Majority of the fish farmers falls within the age bracket of 41 – 45 years (26.3%), while 20.6% were on the age bracket of 36 – 40 years, 46 – 50 years (18.3%), 51 and above (16.3%) and 31 – 35 years (14%). This shows that fish farmers are predominantly between the ages of 31 – 50 years and above. Very few young people are engaged in fish farming 26 – 30 years (4.3%). This could be as a result of pursuit for higher education by these groups of persons.

It is interesting to note that majority of the respondents are educated. Respondents with B.A/B.Sc degrees accounts for 47.3%, HND/ND certificates accounts for 19.3% while N.C.E./T.C. 2 accounts for 7.3%. This implies that majority of the fish farmers had one form of tertiary education or the other. WAEC and PSLC accounts for 10% and 16% respectively.

Data from the study show that only 11 (3.6%) had education in fisheries and related discipline, with 289 (96.3%) in other areas/discipline outside fisheries. This means that fish farming is dominated by individuals who had no formal training in fish farming management. Out of the 11 (3.6%) respondents who had education in fisheries, ND/HND from Colleges of Agriculture accounts for 1.7%, B.S.c./M.S.c./Ph.D accounts for 0.6%. N.C.E. and Polytechnic education accounts for 0.6% respectively.

TABLE 2 TYPES OF FISH FARMING

TYPE	FREQUENCY	PERCENTAGE
Artificial earth ponds	102	34%
Tank fishing	92	30.56%
Fishing in the wild	58	19.4%
Artificial lakes	48	16%
Total	300	100%

As indicated on the above table, only 58 (19.4%) respondents practice fishing in the wild. Most farmers however indicated that they combine it with fishing behind their houses, through created earth ponds and tanks. Most of the farmers who indicated fishing in the wild, where found in the Bayelsa axes (Ogbia, Otuekpeti, Trofani). These are all along the rivers. All respondents indicated that they practice fish farm for commercial purposes.

TABLE 3: FISH FARMING EXPERIENCE IN YEAR

YEARS OF EXPERIENCE	FREQUENCY	PERCENTAGE
2 – 4 years	71	23.7%
5 – 7 years	62	20.7%
8 – 10 years	58	19.3%
11 – 13 years	42	14%
14 – 16 years	39	13%
17 – 20 years	17	5.7%
20 years and above	11	3.6%
Total	300	100%

Table 3 reveals that people have been engaged in fish farming for the past 17 years and above (5.7%) in the Niger Delta Region. However this study notes that between the last 2 – 4 years, new

entrants have come into fish farming (23.7%) as indicated in the table. This finding contradicts Ofuoku, et al (2008) observation that fish farming diffused very slowly among the farmers in Delta State. This study also reveals that fish farmers in this Region no longer depended on many fresh and estuarine water sources, such as rivers, and streams as noted by Ofuoku, et al (2008). Many are now depending on artificially created sources of water.

TABLE 4: INFORMATION NEEDS OF FISH FARMERS

NEEDS	FREQUENCY	PERCENTAGE
Feeds	294	98%
New trends	182	60.6%
Disease control and treatment	181	60.3%
Credit facilities	172	57.3%
Equipments	138	46%
Drugs	108	36%
Fingerlings	121	40.3%
Government/private involvement	111	37%
Storage	82	27.3%

It is obvious from the table that fish farmers need information in nearly all the areas presented to them. The reason been the urge to improve and increase yields. Information on when, and how to buy or lease equipments, 138 (46%). Where and how to buy or produce fingerlings, 121 (40.3%) is a pressing need among fish farmers. Information needs on feeds, 294 (98%) is high. That may be due to scarcity of feeds during the course of the study. Fish farmers however need information on a continuous basis on new trends 182 (60.6%); disease control and treatment 181 (60.3%), these two areas guarantee the farmers investment and life span in the business. Fish farmers also need information on credit facilities 172 (57.35%). It is obvious that many of them need capital for investment and improvement.

TABLE 5: SOURCES OF INFORMATION

SOURCES	FREQUENCY	PERCENTAGE
Personal experience	189	63%
Workshop/seminar	152	50.6%
Friends and Neighbours	128	42.6%
Ministry of Agric	89	29.6%
Magazines	53	17.6%
Newspapers	38	12.6%
Extension officers	28	9.3%
Local Government Offices	21	7%
Non Government organizations	38	12.6%
TV Broadcast	-	-
Radio Broadcast	-	-
Internet	-	-
Traditional Rulers/community leader	-	-
Journals	-	-
Libraries	-	-
Posters	-	-

Table 5 shows multiple responses in relation to sources of information. The responses indicate that personal experience topped the list, 189 (63%), followed by workshop/seminar 152 (50.6%). Friends and Neighbours accounts for 128 (42.6%), Ministry of Agric. 89 (29.6%), Magazines 53 (17.6%), Extension Officers and NGOs accounts for 38 (12.6%) respectively; while Newspapers 28 (9.3%). Very few get information through local government offices, 21 (7%).

It is instructive to note that non of this group of fish farmers indicated print and electronic media as sources of information as shown in the table above Oladele (2006) had indicated that Bayelsa and Delta States (the surveyed states) had programme named farmers hour and green fingers respectively between 1995 – 2001. These Programmes still run today, however farmers failed to indicate these programmes as sources of information because first, some claimed ignorance of the programmes on Television and Radio, while those who know of them claimed there is no electricity to watch or listen to them. The implication of this is that stakeholders in the provision of agricultural information need to do more in the area of information delivery and dissemination for fish farmers.

Data collected from the field indicated that fish farmers see agricultural extension officers only occasionally. They indicated that where they get information from agricultural extension officers, information was not current as the information received do not answer to their agitations and therefore do not solve some of their problems.

TABLE 6: CONSTRAINTS TO ACCESS TO INFORMATION

CONSTRAINTS	FREQUENCY	PERCENTAGE
High cost of materials	192	64%
Lack of irrelevant materials in offices and libraries	162	54%
Insufficient agricultural Extension officers	119	39.6%
agricultural Information Providers	92	30.6%
Format of Presentation	82	27.3%
Language barriers	72	24%

Table 6 reveals that there are many constraints to access to information by fish farmers in the Niger Delta Region. One of the major constraints indicated is lack of relevant materials in agricultural offices and libraries (54%) in the area. Most of these farmers pointed out that when they bother to visit the above mentioned places, they left disappointed because of lack of relevant and out of date materials which cluster the shelves of these offices. These farmers also assert that where they got information i.e. workshop and seminars attended, the cost is a major constraint (64%). Another constraint was in the format and language of presentation of information they consider relevant to them, 82 (27.3%) and 72 (24%) respectively. This problem is further compounded by the lack of agricultural extension officers (39.6%) who would serve as interpreters of what is in the information bulletins and practical instructors on the field for the fish farmers; extension contact is inadequate. The combination of these constraints above, conspire to impede access to agricultural information in fish farming.

Conclusion and Recommendations

This paper investigated fish farmers who are engaged in fish farming through created fish farms (homestead fishing). These farmers are mostly literate and business minded, fishing is their main business occupation. They depend on statistical reports, research results and market analysis for improved yield and economical gains. Information for this group therefore is a prerequisite.

This study concludes that there is difficulty in accessing agricultural information by fish farmers. Information that would otherwise create a platform for improved and increased yields of fish for the populace and a more profitable and meaningful job for the fish farmers. Reliable and relevant information for farmers are available in the areas where farmers indicated that they need information i.e. feeds, fingerlings, credit facilities etc. This information are available in the Ministry of Agriculture, ADP offices, National Agricultural Extension and Research Liaison Services (NAERLS), agricultural research centres, libraries and privately organized workshops, seminars, and conferences.

This wealth of information is however not readily accessible because of many impeding variables among which are; insufficient agricultural extension officers, lack of use of media, language barriers and the unreliable nature of electricity in Nigeria.

The paper therefore recommends that:

- Formatting and packaging of agricultural information should be done to suit the end users (fish farmers) in this geographical area.
- Information delivery and dissemination should be consistent and continuous by stakeholders in the agricultural sector in Nigeria. This would eliminate the bottlenecks of late and out of date information and even non-information at all.
- Farm broadcast which have been established should be supported by possible mobile public address system, so that even when electricity is a problem, fish farmers can be reached.

- More extension officers and agents should be engaged to ensure effective coverage of farming zones. These officers should also be mobilized for field work on time, so that current information can be received on time by fish farmers

References

Adomi, E. E., Ogbomo, M.O.., Inoni, O. E. (2003). Gender factor in crop farmers' access to agricultural information in rural areas of Delta State. *Library Review 52* (8) pp. 388 – 393.

Aina, L.O., Kaniki, A.M., & Ojiambo, J.B. (1995). Preface. in Aina, L.O., Kaniki, A.M., & Ojiambo, J.B. (Eds), *Agricultural information in Africa*. Ibadan: Third World Information Services.

Ekoja, I.I. (2003). Farmers' access to agricultural information in Nigeria. *Bulletin of the American Society for Information Science and Technology*, August/September. Pp. 21 – 23.

Ministry of Economic planning, Delta State, (2007). Delta Seeds-Delta state Economic Empowerment and Development strategy (2005 – 2007). MEP.

NNPC (2005). Towards Rebuilding the Niger Delta 1999 – March 2004. Nigeria National Petroleum Corporation.

Ofuoku, A.N., Emah, G.N., & Itedjere, B.E. (2008). Information utilization among rural fish farmers in central agricultural zone of Delta State, Nigeria. *World Journal of Agricultural Science 4* (5); 558 – 564.

Oladele, O.I. (2006). Multilinguality of farm broadcast and agricultural information access in Nigeria. *Nordic Journal of African Studies 15* (2): 199 – 205.